

Biopsy Needle Having Rotating Core For Shearing Tissue

Abstract of Disclosure

A biopsy tool that performs a biopsy and a complete removal of a tumor or lesion in a single step. A hollow pointed needle having a cylindrical lumen has an inner tube mounted for rotation in the lumen. A slot is formed in the hollow needle in a sidewall of the needle and an opening having sharp peripheral edges is formed in the inner tube. A vacuum is applied to the lumen of the hollow needle to pull tissue into the slot during a biopsy procedure. Rotation of the inner tube shears off a slice of tissue and the vacuum pulls the slice of tissue to a remote collection point. Each rotation of the inner tube removes an additional slice of tissue so that an entire lesion or tumor is removed in a short period of time. The sliced tissue is undamaged and suitable for use as a biopsy sample for diagnostic purposes.

Figures

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